

## **ABSTRACT**

### ***Quiz Button with Score Control and Display using Atmega16 Microcontroller***

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*To create Quiz Button with Score Control and Display using Atmega16 Microcontroller is to design and to produce its hardware and software, and also gaining knowledge of its performance.*

*Quiz Button with Score Control and Display using Atmega16 Microcontroller hardware was designed with an operator circuit using six push buttons as input and three 0.56-inches seven segment as output, three group name and three digit score display circuits using four 3-inches seven segment as output and one push button as input, and also a sound producing buzzer which is included in the minimum system circuit. The software to control the Atmega16 microcontroller uses C programming language and a CodeVision AVR compiler. This software only has one main program without any sub-program.*

*To summarize it all, the hardware production was a success, using Atmega16 microcontroller minimum system and other instrument as needed. Quiz Button with Score Control and Display using Atmega16 Microcontroller's software is created using CodeVision AVR. This tool counts each group's score based on operator's input, displaying the score on each group's displays, and control the lighting of group name and buzzer based on input from group buttons.*

***Keywords : Button, Quiz, Microcontroller, Display***